

CLAIMS:

1. A method for data management permitting selective access to a database by subject and/or data grouping, the method comprising :

a) providing at least one database to which access is to be provided by subject or data grouping;

b) providing data processing means adapted to provide access to said database;

c) providing access instruction means adapted to permit instructions to be provided to said data processing means for said access, and causing same to instruct said data processing means accordingly;

d) and causing said data processing means to match said instructions with data items stored in said database to permit said matched data items to be identified for retrieval;

wherein

e) said step of causing said access instruction means to instruct said data processing means being accompanied by the steps of data processing of said instructions and either then or previously of said database data or of a reference portion thereof to facilitate said matching of said instructions with said data items;

f) said data processing of said instructions and of said database data comprising the steps of :

i) taking textual data from said instructions and from said database;

ii) subjecting said textual data to analysis with respect to subject matter by a series of steps providing a degree of word sense disambiguation; and

g) and said steps being performed at least in part in relation to said data items stored in said database by reference to said textual data after said analysis with respect to subject matter.

2. A method according Claim 1 characterised by the step of subjecting textual data from said instructions and/or from said database also to at least one step of morphology rule analysis by said data processing means and adapted to provide a preliminary or subsequent refinement step with respect to the textual content of said textual data.

3. A method according to claim 1 characterised by said step of subjecting said textual data to analysis with respect to subject matter being adapted to identify single concepts in said instructions and in said database and being adapted to seek matches there-between.

4. A method according to claim 3 characterised by said step of matching said instructions with said data items comprising identifying one or more text locations within said database where matches with respect of said single concept are located.

5. A method according to claim 1 characterised by said step of subjecting said textual data to analysis with respect to subject comprising use of algorithms adapted to determine a degree of the sense in which a word is used by reference to the context in which the word is used by analysis of adjacent words and/or word groups with which it is used.

6. A method according to claim 1 characterised by step of subjecting said textual data to analysis with respect of subject matter comprising use of algorithms adapted to determine a degree of the sense in which a word is used by reference to a database dictionary of synonyms and synonym sets whereby identification of word sense is not prevented variations in language use as between the instructions and the database.

7. A method according to claim 1 characterised by the step of establishing a reference or index database based on textual and other data from the original database and which is to form a searchable virtual database for subject matter identification and in which identified textual subject matter or concepts are stored in a compact data format.

8. A method for data management permitting selective access to a database by subject and/or data grouping, characterised by the step of data matching by reference to textual data subject matter.

9. A method according to claim 8 characterised by said step of providing instructions for data matching to selectively access the database.

10. A method according to claim 9 characterised by said step of subjecting said textual data to analysis with respect to subject matter being adapted to identify single concepts in said instructions and in said database and being adapted to seek matches there-between.

11. A method according to claim 10 characterised by said step of matching said instructions with said data items comprising identifying one or more text locations within said database where matches with respect of said single concept are located.

12. A method according to claim 9 characterised by said step of subjecting said textual data to analysis with respect to subject comprising use of algorithms adapted to determine a degree of the sense in which a word is used by reference to the context in which the word is used by analysis of adjacent words and/or word groups with which it is used.

13. A method according to claim 9 characterised by step of subjecting said textual data to analysis with respect of subject matter comprising use of algorithms adapted to determine a degree of the sense in which a word is used by reference to a database dictionary of synonyms and synonym sets whereby identification of word sense is not prevented variations in language use as between the instructions and the database.

14. A method according to claim 9 characterised by the step of establishing a reference or index database based on textual and other data from the original database and which is to form a searchable virtual database for subject matter identification and in which identified textual subject matter or concepts are stored in a compact data format.

15. A method according Claim 9 characterised by the step of subjecting textual data from said instructions and/or from said database also to at least one step of morphology rule analysis by said data processing means and adapted to provide a preliminary or subsequent refinement step with respect to the textual content of said textual data.

16. A method for data management permitting selective access to a database by subject and/or data grouping, the method comprising :

- a) providing at least one database to which access is to be provided by subject or data grouping;
- b) providing data processing means adapted to provide access to said database;
- c) providing access instruction means adapted to permit instructions to be provided to said data processing means for said access, and causing same to instruct said data processing means accordingly;
- d) and causing said data processing means to match said instructions with data items stored in said database to

permit said matched data items to be identified for retrieval;
characterised by

e) said step of causing said access instruction means to instruct said data processing means being accompanied by the steps of data processing of said instructions and either then or previously of said database data or of a reference portion thereof to facilitate said matching of said instructions with said data items;

f) said data processing of said instructions and of said database data comprising the steps of :

i) taking textual data from said instructions and from said database;

ii) subjecting said textual data to analysis with respect to subject matter by cross-referencing the textual content thereof with respect to the corresponding textual content of an indexed reference text database or lexical dictionary adapted to facilitate word sense disambiguation; and

iii) identifying a degree of limitation of word sense by reference to said additional textual data of said reference text database whereby, a degree of textual pre-analysis for subject indexing and matching purposes is provided.

17. A method according Claim 16 characterised by the step of subjecting textual data from said instructions and/or from said database also to at least one step of morphology rule analysis by said data processing means and adapted to provide a preliminary or subsequent refinement step with respect to the textual content of said textual data.

18. A method according to claim 16 characterised by the step of subjecting textual data from said instructions also to at least one step of statistical text analysis by said data processing means and adapted to provide a preliminary or subsequent refinement step with respect to the textual content of said textual data.

19. A method for data management permitting selective access to a database by subject and/or data grouping characterised by the step of causing database access instruction means instructions to data processing means to be accompanied by the step of data processing of said instructions and either then or previously of said database or a reference portion thereof to facilitate said matching, said data processing comprising the steps of taking textual data from said instructions and from said database and subjecting said textual data to analysis by subject matter with cross-referencing of textual content with that of an indexed reference text database or lexical dictionary adapted to facilitate word sense disambiguation, and identifying, a degree of limitation of word sense by reference to said additional text of said reference text database whereby a degree of textual pre-analysis for subject indexing and matching purposes is provided.

20. A method according Claim 19 characterised by the step of subjecting textual data from said instructions and/or from said database also to at least one step of morphology rule analysis by said data processing means and adapted to provide a preliminary or subsequent refinement step with respect to the textual content of said textual data.

21. A method for data management permitting selective access to a database by subject and/or data grouping, the method comprising :

a) providing at least one database to which access is to be provided by subject or data grouping;

b) providing data processing means adapted to provide access to said database;

c) providing access instruction means adapted to permit instructions to be provided to said data processing means for said access, and causing same to instruct said data processing means accordingly; and

d) causing said data processing means to match said instructions with data items stored in said database to permit said matched data items to be identified for retrieval;

characterised by

e) the step of subjecting textual data from said instructions and/or from said database also to at least one step of statistical textual analysis by said data processing means, in combination with at least one step of linguistic analysis by cross-referencing the textual data to a linguistic textual database, said statistical and linguistic text analysis steps being adapted to provide successive refinement steps with respect to the textual content of said textual data for matching purposes.

22. A method according Claim 21 characterised by the step of subjecting textual data from said instructions and/or from said database also to at least one step of morphology rule analysis by said data processing means and adapted to provide a preliminary or subsequent refinement step with respect to the textual content of said textual data.

23. A method for data management permitting selective access to a database by subject and/or data grouping, the method comprising :

- a) providing at least one database to which access is to be provided by subject or data grouping;
- b) providing data processing means adapted to provide access to said database;
- c) providing access instruction means adapted to permit instructions to be provided to said data processing means for said access, and causing same to instruct said data processing means accordingly;
- d) and causing said data processing means to match said instructions with data items stored in said database to permit said matched data items to be identified for retrieval;

characterised by

- e) said step of causing said access instruction means to instruct said data processing means being accompanied by the step of causing said data processing means to search a reference or index portion of or associated with said database to facilitate said matching of said instructions with data items;
- f) said reference or index portion of or associated with said database having been prepared from said database data by a method comprising the steps of:
 - i) taking textual and/or other data from said database;
 - ii) subjecting said textual and/or other data to analysis with respect to the textual content thereof;
 - iii) adopting modifications and/or elements of said textual data resulting from said analysis for said reference or index, said modifications and/or elements being adapted to permit more precise textual matching with search instructions.

24. A method according to claim 23 characterised by said analysis of said textual data comprising text parsing.

25. A method according to claim 23 characterised by said step of analysis of said textual data comprising word frequency analysis.

26. A method according to claim 23 characterised by said analysis of said textual data comprising document structure parsing.

27. A method according to Claim 23 characterised by the step of subjecting textual data from said instructions and/or from said database also to at least one step of morphology rule analysis by said data processing means and adapted to provide a preliminary or subsequent refinement step with respect to the textual content of said textual data.

28. A method for data management permitting selective access to a database by subject and/or data grouping characterised by the step of causing database access instructions means instructions to data processing means to cause data processing means to search a reference or index portion of or associated with said database to facilitate said matching, said reference or index portion of or associated with said database having been prepared from database data by a method comprising subjecting said textual data to analysis with respect to textual content, and adopting modifications and/or elements of the textual data resulting from said analysis for said reference or index to permit more precise textual matching with search instructions.

29. A method according to claim 28 characterised by said analysis of said textual data comprising text parsing.

30. A method according to claim 28 characterised by said step of analysis of said textual data comprising word frequency analysis.

31. A method according to claim 28 characterised by said analysis of said textual data comprising document structure parsing.

32. A method according to Claim 28 characterised by the step of subjecting textual data from said instructions and/or from said database also to at least one step of morphology rule analysis by said data processing means and adapted to provide a preliminary or subsequent refinement step with respect to the textual content of said textual data.